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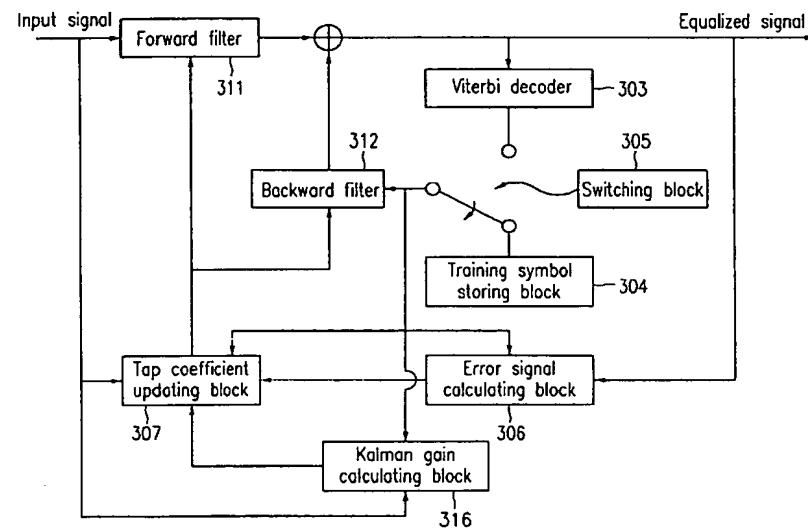
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(54) Title: **KALMAN-VITERBI JOINT CHANNEL EQUALIZER**



(57) Abstract: In a channel equalizer applicable to a digital television receiver, a forward filter and a backward filter perform filtering to an input signal and a predetermined signal. A Viterbi decoder corrects errors during a transmission procedure in a blind mode. A training symbol storing block stores training symbols. An output signal of the Viterbi decoder and symbols are provided to the backward filter in accordance with a blind mode or a training mode. A Kalman gain is calculated in a Kalman gain calculating block and an error signal is calculated by comparing an equalized signal, symbols, and the output signal of the Viterbi decoder with one another. A tap coefficient is updated by using the calculated error signal and the Kalman gain.

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